

DRAFT - Nomination for Shana A. Heisey for IWR Technical Employee of the Year

Ms. Heisey is an exceptionally distinguished young employee of IWR, who has made important technical contributions to development of significant IWR products and services, while at the same time engaging in professional activities and assisting in internal IWR organizational efforts and support of Corps-wide planning efforts.

She has primary responsibility for the ongoing development and support of IWR-Plan, for which she has led an effort to re-design IWR-Plan and provide new capabilities, including enhanced visualization and analysis techniques. This latest version of IWR-Plan includes a dramatically improved user interface, which Ms. Heisey was instrumental in bringing to fruition. She also develops instructional materials for teaching IWR-Plan in the field and conducts training courses nationally on its use and application.

She brought her experience of working on navigation projects while an economist at the Norfolk District to IWR, where she also has the lead role in development of the HarborSym model, an important component of the NETS initiative. She has worked on the technical design of HarborSym, defining the needed model capabilities for use in widening projects, and in this regard has performed the complex task of data analysis of vessel movements within ports, developing methodologies for aggregating data from multiple sources, performing quality analysis and quality control, and developing data sets for HarborSym usage for Sabine-Neches and Tampa Harbor. She is also engaged in work on synthetic generation of vessel movements for use in conjunction with HarborSym, and as well is in charge of the development of the HarborSym deepening model, now in progress. This last project is particularly challenging from a technical point of view, but is an essential component of the proposed NETS framework. For both HarborSym and IWRPlan, she has been an active technical leader and participant in the development efforts, while also effectively managing the work of various contractor teams. She has also presented her work to the Planning Associates program, and to various Corps Districts.

In terms of professional activities, Ms. Heisey has made numerous presentations on various aspects of her work, including a presentation on HarborSym at the April 2004 Economics and Environment Conference, and notably, she authored a paper on HarborSym (published in the conference proceedings), and presented it at the Harbor and Maritime Simulation (HMS) 2004 conference in Rio De Janeiro in September of 2004. HMS is an annual conference, held around the world, which brings together individuals working in the field of port-related simulation studies. Due to her participation at the 2004 HMS conference, she has been invited to serve on the International Program Committee for forthcoming HMS conferences. This role includes reviewing technical paper submission.

Ms. Heisey is also the recipient of the 2005 DePaepe Willems Award of the US Section of PIANC, an award given for the most outstanding technical paper prepared on an aspect of waterborne transport, and actively participates as a member of PIANC.

Ms. Heisey also served IWR directly through much of 2004 as part of the IWR reorganization team effort that has led to the current IWR organizational structure.

Shana Heisey is highly qualified and very deserving of the “Technical Employee of the Year” award. She combines strong technical competence, research and development on leading IWR products, regular publication and presentation of her work, ongoing education (in pursuit of an advanced degree in Economics), active participation in a variety of Corps and non-Corps professional activities, and engagement within IWR itself. She is an outstanding representative and ambassador for IWR, and should be appropriately honored with this award.